IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (currently amended) A ~~storage~~ computer-readable medium storing a program used to direct a computer to perform optimization process of the program, the process comprising: extracting data items from the program; laying out the data items in memory provided in the computer; extracting defined but unused data items from the extracted data items; determining whether or not a plurality of data items forming at least a part of a data item having a hierarchical structure in the unused data items can be merged into a new data item based on the layout result; and outputting a program in which the plurality of data items are merged into the new data item based on the determination result, wherein

the number of unused data items is reduced by merging a plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory;

the program is optimized such that the necessary memory requirement during compilation or generation of a data item dictionary is reduced.

2. (currently amended) The ~~storage~~computer-readable medium according to claim 1, the process further comprising: said plurality of unused data items to be merged are laid out in adjacent areas in the memory.

3. (currently amended) The ~~storage~~computer-readable medium according to claim 2, the process further comprising: said plurality of unused data items to be merged are data items forming a part of another data item having a hierarchical structure, and ~~locating~~ located in an identical hierarchical level in the hierarchical structure.

4. (currently amended) The ~~storage~~computer-readable medium according to claim 1, the process further comprising: said plurality of unused data items to be merged are a data item having a hierarchical structure ~~and a data item configuring the data item,~~ and the data item having the hierarchical structure is configured by one data item.

5. (currently amended) The ~~storage~~computer-readable medium according to claim 1, the process further comprising: in the merge, deleting a code for declaration of a plurality of unused data items from the program; and adding code for declaration of a new data item.

6. (currently amended) The ~~storage~~computer-readable medium according to claim 5, the process further comprising: setting an item length of the new data item based on item lengths of the plurality of unused data items to be merged.

7. (currently amended) The ~~storage~~computer-readable medium according to claim 6, the process further comprising: when data types of a plurality of unused data items to be merged are all the same, setting a data type of the new data item to be the same as the data types of the plurality of unused data items to be merged.

8. (currently amended) The ~~storage~~computer-readable medium according to claim 5, the process further comprising:

~~setteing~~ setting a data type of the new data item as having a smallest storage area.

9. (currently amended) The ~~storage~~computer-readable medium according to claim 5, the process further comprising: ~~setteing~~ setting as nameless an item name of the new data item ~~as no name~~.

10. (currently amended) The ~~storage~~computer-readable medium according to claim 5, the process further comprising: setting an item name of the new data item based on any of the plurality of unused data items to be merged.

11. (currently amended) The ~~storage~~computer-readable medium according to claim 1, the process further comprising: changing a layout of the data item in the memory based on a changed program.

12. (currently amended) The ~~storage~~computer-readable medium according to claim 1, the process further comprising: deleting code for definition of an unused data item from a changed program.

13. (currently amended) A program optimizing method for optimizing a program, comprising: extracting data items from the program; laying out the data items in memory provided in the computer; extracting defined but unused data items from the extracted data items; determining whether or not a plurality of data items forming at least a part of a data item having a hierarchical structure in the unused data items can be merged into a new data item based on the layout result; and changing the program such that the plurality of data items are merged into the new data item based on the determination result, wherein

the number of unused data items is reduced by merging a plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory;

the program is optimized such that the necessary memory requirement during compilation or generation of a data item dictionary is reduced.

14. (currently amended) An optimizing apparatus for optimizing a program, comprising:

a computer comprising,

a data item extraction unit extracting data items from the program; a layout unit laying out the extracted data items in memory; an unused data item extraction unit extracting defined but unused data items from the extracted data items; a merge determination unit determining based on the layout result whether or not a plurality of unused data items forming at least a part of a data item having a hierarchical structure in the unused data items can be merged into a new data item; and a data item merge unit outputting the program in which the plurality of data items are merged into the new data item, wherein

the number of unused data items is reduced by merging a plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory;

the program is optimized such that the necessary memory requirement during compilation or generation of a data item dictionary is reduced.

15. (currently amended) An optimizing apparatus for optimizing a program, comprising:

a computer comprising,

data item extraction means for extracting data items from the program; layout means for laying out the extracted data items in memory; unused data item extraction means for extracting defined but unused data items from the extracted data items; merge determination means for determining based on the layout result whether or not a plurality of unused data items forming at least a part of a data item having a hierarchical structure in the unused data items can be merged into a new data item; and data item merge means for outputting the program by which the plurality of data items are merged into the new data item, wherein

the number of unused data items is reduced by merging a plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory;

the program is optimized such that the necessary memory requirement during compilation or generation of a data item dictionary is reduced.

16. (new) A method of reducing a plurality of unused data items forming a data item having a hierarchical structure into one data item, the method comprising:

re-extracting defined but unused data items from extracted data items of a program layed out in a memory of a computer;

merging the re-extracted plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory; and

outputting a program in which the plurality of data items are merged into the new data item.

17. (new) An apparatus for reducing a plurality of unused data items forming a data item having a hierarchical structure into one data item comprising:

a memory; and

a processor, the processor extracting defined but unused data items from extracted data items of a program layed out in the memory of a computer, merging the re-extracted plurality of unused data items forming a data item having a hierarchical structure into one data item based on the hierarchical level in the hierarchical structure and the arrangement of the data items in the memory, and outputting a program in which the plurality of data items are merged into the new data item.